

ABSTRACT OF THE DISCLOSURE

Assuming that there are three continuous frames, i.e, cross sectional images of an organism, a dummy region of interest (ROI) is specified manually in the first frame, a temporary ROI is set in the second frame at the same position as that of the dummy ROI in the first frame. Whether a specific region in the second frame is inside or outside of a true ROI is judged based on the initial judgment criterion and values of pixels in the specific region. Whether a specific region in the third frame is inside or outside of the true ROI is judged based on values of pixels of regions that have been judged to be inside the region of interest in the second frame.